

Application Number 10/511931
Response to the Final Office Action mailed July 31, 2009

REMARKS

This Amendment is in response to the final Office Action mailed on July 31, 2009. Claims 63 and 65 are amended editorially. No new matter is added. Claims 63-70 are pending.

Examiner Interview:

Applicants thank the Examiner Van Chow, for the telephonic interview that took place on October 5, 2009 with the Applicant's representative Amol Kavathekar. In the interview, we requested clarification as to the rejection to claim 63. The Examiner noted there were several discrepancies in the rejection as to which prior art reference taught the features of claim 63. However, the Examiner noted that Shoji is relied upon for teaching "changing a number of elements, which is the number of elements to be corrected" and Yokoi is relied upon for teaching "according to a recording density". No consensus was reached regarding this point.

Features of claim 64 were also discussed. In particular, the Examiner agreed that the features of "the second number of elements is smaller than the first number of elements" in claim 64 do not appear to be taught in the prior art references.

§103 Rejections:

Claims 63-70 are rejected as being unpatentable over Shoji (US Patent No. 6,101,159) in view of Yokoi (US Patent No. 6,459,666). This rejection is traversed.

Claim 63 is directed to an optical information recording method that recites, inter alia, a recording pulse correction step of correcting a predetermined number of elements to be corrected in order to form a recording mark in a predetermined position. Also, in the recording pulse correction step, the number of elements to be corrected is changed depending on the respective densities.

The combination of Shoji and Yokoi does not teach or suggest these features. The rejection relies on Figures 4A and 4B of Shoji for teaching that the number of elements to be corrected is changed. However, Figure 4A of Shoji merely provides a correction table (after revision) having 18 elements at a single recording density and Figure 4B of Shoji merely provides a correction table (before revision) having 18

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elements at a single recording density. Thus, Figures 4A and 4B of Shoji merely teach changing a value for each of the 18 elements and not changing the number of elements.

Yokoi does not overcome these deficiencies of Shoji. Yokoi is merely provided for teaching that P_{wmin} is obtained at the minimum recording density and P_{wmax} is obtained at the maximum recording density (see column 24, lines 25-33 of Yokoi). Thus, only the value for each of the elements is changed depending on a recording density and the number of elements to be corrected remain the same.

Moreover, as Shoji merely teaches a method for recording information at a single recording density, Shoji provides no motivation for modifying its method to change the number of elements to be corrected depending on the respective densities, as required by claim 63. Accordingly, it would not be obvious to one skilled in the art to modify the method of Shoji based on the teachings of Yokoi. Thus, nowhere does the combination of Shoji and Yokoi teach or suggest a recording pulse correction step in which the number of elements to be corrected is changed depending on the respective densities, as recited in claim 63.

For at least these reasons claim 63 is not suggested by the combination of Shoji and Yokoi and should be allowed. Claims 64 and 67-69 depend from claim 63 and should be allowed for at least the same reasons.

Claim 65 is directed to an optical information recording apparatus that recites, among other features, a recording pulse correction means for correcting a predetermined number of elements to be corrected, in order to form a recording mark in a predetermined position. Claim 65 also recites that the recording pulse correction means differentiates a number of elements, which is the number of elements to be corrected, according to the respective recording densities.

The combination of Shoji and Yokoi does not teach or suggest these features. The rejection relies on Figures 4A and 4B of Shoji for teaching that the number of elements to be corrected is changed. However, Figure 4A of Shoji merely provides a correction table (after revision) having 18 elements at a single recording density and Figure 4B of Shoji merely provides a correction table (before revision) having 18 elements at a single recording density. Thus, Figures 4A and 4B of Shoji merely teach changing a value for each of the 18 elements and not differentiating the number of elements.

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Yokoi does not overcome these deficiencies of Shoji. Yokoi is merely provided for teaching that Pwmin is obtained at the minimum recording density and Pwmax is obtained at the maximum recording density (see column 24, lines 25-33 of Yokoi). Thus, only the value for each of the elements is changed depending on a recording density.

Moreover, as Shoji merely teaches an apparatus for recording information on a single recording density, Shoji provides no motivation for modifying its apparatus to differentiate the number of elements to be corrected depending on the respective densities, as required by claim 63. Accordingly, it would not be obvious to one skilled in the art to modify the apparatus of Shoji based on the teachings of Yokoi. Thus, nowhere does the combination of Shoji and Yokoi teach or suggest a recording pulse correction step in which the number of elements to be corrected is changed depending on the respective densities, as recited in claim 63. For at least these reasons claim 65 is not suggested by the combination of Shoji and Yokoi and should be allowed. Claims 66 and 70 depend from claim 65 and should be allowed for at least the same reasons.

Conclusion:

Applicants respectfully assert that the pending claims are in condition for allowance. If a telephone conference would be helpful in resolving any issues concerning this communication, please contact Applicants' primary attorney-of record, Douglas P. Mueller (Reg. No. 30,300), at (612) 455-3804.



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Respectfully submitted,

HAMRE, SCHUMANN, MUELLER &
LARSON, P.C.
P.O. Box 2902
Minneapolis, MN 55402-0902
(612) 455-3800

By: 

Douglas P. Mueller
Reg. No. 30,300
DPM/ahk